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Wagoner, Brady

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Notes on a Social Psychology of Thinking: A comparison of Bartlett and Moscovici

BRADY WAGONER

Aalborg University

INTRODUCTION: FROM LOGIC TO EVERYDAY THINKING

Psychologists have long had an interest in the study of thinking. However, it has typically been approached through rules of logic and association. As a result, scientific inference has been the standard by which all thinking is assessed and the logic puzzle (having a single solution arrived through abstract procedures) has been the paradigmatic method of study. Thinking in this perspective becomes an individual activity isolated from social influences and context. This approach has tended to focus on experimentally demonstrating thousands of ways in which human thinking is distorted or inaccurate, rather than seeing it in situ. In this way, psychologists project their own scientific ways of thinking onto their subjects—committing what James (1890) called the ‘Psychologist’s Fallacy’ – rather than studying their subjects from within their own meaningful and heterogeneous lifeworlds. Let us consider Kahneman’s (2011) influential research on heuristics as an illustrative example of the standard psychological approach to thinking.

In one famous experiment, Tversky and Kahneman (1982) gave subjects the following description: “Linda is 31 years old, single, outspoken, and very bright. She majored in philosophy. As a student, she was deeply concerned with issues of discrimination and social

justice, and also participated in anti-nuclear demonstrations”. They then asked whether it is more probable that “Linda is a bank teller” or “Linda is a bank teller and is active in the feminist movement”. 85% of their participants chose the second and therefore committed a logical fallacy, or did they? Gigerenzer (2005) has pointed out that “probable” is not here interpreted to mean mathematical probability but rather social plausibility. In other words, the meaning in everyday communication is different from that of scientific discourse. If the question is asked differently subjects do not commit the fallacy, thus demonstrating contextual sensitivity in thinking.

An alternative approach to the study of thinking is to see it as an everyday social activity, on its own terms, within its own procedures and logic. Everyday thinking is an open process, which involves thinking through the frameworks of different social groups, rather than adopting a single logical procedure. This approach brings us to the idea that, in a differentiated society, multiple frameworks of thought are available, a condition Moscovici (1976/2008) has called ‘cognitive polyphasia’. Moreover, these do not remain in isolation from each other: they co-develop, define each other in opposition, are influenced in various ways, borrow ideas and shun others.

This paper intends to explore these qualities and dynamics of everyday thinking through the work of Frederic Bartlett and Serge Moscovici. In so doing, it will offer a comparison of their respective contributions and highlight points of actual and potential influence from Bartlett to Moscovici. This comparison will revolve around three issues spread over Bartlett’s career: (1) the relation between ‘primitive’ and ‘advanced’ modes of thought; (2) the conventional character of thought and (3) constructive thinking as creative gap filling. Through these comparisons I aim to advance tools for the further study of everyday thinking, in its polyphasic social dimensions.

COMPARING CULTURES: PRIMITIVE MAN AND KANT

An important early step in re-conceiving the psychology of thinking was made by the French anthropologist Lévy-Bruhl. In Moscovici’s (2001) words, “Lévy-Bruhl’s lifelong project was twofold: first, to explain the mentality of so-called ‘primitive’ people by social causes rather than individual causes, as Frazer (1922) had done; and second, to demystify western thought as privileged in comparison to other forms of thought” (p. 213). In so doing, Lévy-Bruhl relativized

the categories of the human mind, thus upsetting the widely held idea of psychological unity of humankind, according to which all people spontaneously begin with animistic explanations of nature due to the paucity of data at their disposal and later naturally progress to more sophisticated explanations. For Lévy-Bruhl primitive and civilized thought are qualitatively different forms of social thinking. The standards imposed by western anthropologists of logical truth and falsity should thus not be used to judge the thought processes of people living elsewhere in the world. In contrast to civilized persons, Lévy-Bruhl argued that primitive thought is characterized by the pre-logical, emotional, mystical and self-contradictory. Primitives do not sharply distinguish themselves from other objects, but rather emotionally participate with them. For example, members of a Brazilian tribe (the Borono) claimed to be an arana (type of parrot) and human being at the same time; thus committing, from an analytic perspective, the logical error of contradiction. Lévy-Bruhl's originality lies in treating primitive thinking positively rather than as simply a poor substitute for modern thinking.

Lévy-Bruhl's work was widely discussed in the 1910s and 1920s. Bartlett and his Cambridge mentor W.H.R. Rivers were sympathetic to his insistence on social over psychological explanations of primitive thought but were critical of the sharp separation he made between primitive and civilized modes of thought. As Lévy-Bruhl had done, Bartlett (1923) sharply opposed purely psychological explanations of primitive thought and cultural expression. Anthropologists and psychologists, for example, had explained the folk-story through deep-seated individual needs, desires and wishes – in psychoanalysis these are the imaginative fulfillment of wishes. The general strategy of theorists was to search for an 'absolute origin' of the story in the mental processes of an individual, rather than to understand a story's contents and function within a particular social community, its distinctive history and traditions. In contrast to this explanation, Bartlett (1923, pp. 12-13) argues that, "It is only if we interpret individual to mean pre-social that we can take psychology to be prehistoric. The truth is that there are some individual responses which simply do not occur outside a social group". Thus, membership in a social group exerts a definite influence on the behavior and thought of any individual in it, whether they are telling a folk-story, participating in a ritual performance, painting a picture or involved in a hunt. Social groups always have normative ways of acting and thinking, regardless of whether individuals within them are self-consciously aware of them. This, however, does not

mean that individuals are determined by the group's ways of thinking (this point is less clear in Lévy-Bruhl's account). Bartlett (1923) is very explicit that responses to the norm will vary, but that membership in a social group inevitably exerts an influence on behavior.

Where Bartlett (1923) most explicitly deviates from Lévy-Bruhl is the latter's strict separation of 'primitive' and 'advanced' forms of thought. According to Bartlett (1923, p. 289) "the error... is not that the primitive or abnormal are wrongly observed, but that the modern and normal are hardly observed at all". Indeed, Lévy-Bruhl (1926) himself explicitly states that he plainly accepts how contemporary western thought has been characterized and focuses his energy on elucidating the thought processes of primitives. Yet, his contrast rests on 'civilized' thinking as operating according to the dictates of logic. What Lévy-Bruhl ends up comparing is primitive man to a scientific expert rather than the everyday thinking of modern people. Similarly, Moscovici (2001, p. 248) recalls a meeting with Bartlett in the 1950s: "During our conversation he made a remark about Lévy-Bruhl, saying he was wrong to compare primitive man to Kant".

Secondly, Bartlett (1923) observed that there is variability in the primitive's mode of thought, as a function of the topic considered (e.g., death, war, food, art), just as there is in contemporary societies. The same tendencies found in one can also be discovered in the other, though not necessarily in the same contexts in both cultures. He takes the notion of causality as a case in point: "'Causal links' says Lévy-Bruhl, 'which for us are the very essence of nature, the foundation of its reality and stability, have no interest' for the primitive man: he is swayed by a 'kind of a priori over which experience exerts no influence'" (quoted in Bartlett, 1923, p. 289). Yet, examples of establishing links and not establishing links in a causal chain can be found in both the thinking of primitives and modern people. Thus, a diversity of forms of thought can be found in both cultures. Acknowledging this makes the sharp distinction between the two appear untenable. A student of Bartlett's put the point eloquently: "the contention that civilized persons strive always to reach a well-balanced coherent conclusion, while the primitive is willing to tolerate incoherence and even 'considerable contradictions and contrasts' is, if not unfair to the primitive, at least highly flattering to ourselves" (Carmichael, 1940, p. 313).

Instead of a sharp qualitative difference between primitive and modern thought, Bartlett argues for a quantitative one. In his words, "we come from complexity [in primitive thought] to yet greater complexity [in modern thought]" (Bartlett, 1923, p. 256). The increase in complexity

is due in the main to two factors: “the multiplication and division of specific groups, together with immense improvements in the mechanisms of inter-communication” (p. 256). Complexity for Bartlett and Rivers was a result of contact between social groups, which stimulates innovation and differentiation. This is already found in primitive groups but is further accelerated in modern society, creating new conditions for the free movement of thought and construction of new cultural forms. Bartlett (1923, 1932) calls this synthesis of ideas coming from diverse sources and stimulated by group contacts, ‘social constructiveness’. He even thought his own scientific theory was a good example of this (Bartlett, 1958, Ch. 8). In what follows I will explore some parallels with Moscovici’s (1976/2008) theory – focusing in particular on his hypothesis of cognitive polyphasia – and at the same time elucidate the next phase of Bartlett’s thought.

THE DYNAMIC DIVERSITY OF THOUGHT

In his famous *Psychoanalysis: Its Image and its Public*, Moscovici (1976/2008) aimed to re-evaluate commonsense thinking by exploring how scientific ideas are transformed as they become part of commonsense or public knowledge. Before this time, and perhaps to this day, there had been a tendency to consider commonsense thinking as a deficit or vulgarized form of thinking, assessed within the framework of scientific thinking. Instead, Moscovici understood and studied everyday thinking within its own logic and functions, as Lévy-Bruhl had done with primitive thought. Thus, he remapped Lévy-Bruhl’s distinction between forms of thought onto the distinction between scientific and commonsense thinking in modern society, recognizing that the latter cannot be assessed within the logic of the former. At the same time, he incorporated Bartlett’s (1923) insight that one can find many different forms of thought in any given society and that this multiplicity of thinking is dynamic and developing through the interaction between different social groups. Furthermore, like Bartlett (1923), Moscovici (1976/2008) characterized modern societies as becoming increasingly differentiated into specialized social groups, each with its own specific mentality, which are within ever greater knowledge of one another through improvements in communication technology.

In relation to this last point, it is worth quoting at length Moscovici’s introduction of the ‘hypothesis’ of cognitive polyphasia:

With the growth of knowledge and social division we have all become polyglots. Besides French, English or Russian we speak medical, psychological, technical, political languages, etc. We are probably witnessing an analogous phenomenon in regard to thought. In a global manner one can say that the dynamic coexistence – interference or specialization – of the distinct modalities of knowledge, corresponding to definite relations between man and his environment, *determines a state of cognitive polyphasia* (...) Operative or formal judgments habitually represent one of these *dominant* terms in a field of personal and group preoccupations, while playing a subordinate role elsewhere. (Moscovici, 1976/2008, pp. 190-191, emphasis in original)

Cognitive polyphasia is a social condition in which different forms of thought (e.g., medical and religious explanations of madness – Wagner et al., 1999) co-exist in the same society and even in the same individual. This co-existence of cognitive systems is the rule rather than the exception. As such, studying thinking, as a function of inter-individual differences, will no longer do. For example, it will not be sufficient for social psychologists to say that an individual is rigid, dogmatic, intolerant and characterized by a closed mental system *in general*, as discussed in the *Authoritarian Personality* (Adorno et al., 1950): “It is perfectly conceivable that a dogmatic and rigid individual who uses what might be described as a closed cognitive system in the political or racial domain may be tolerant and open in his role as artist, scientist or student” (Moscovici, 1976/2008, p. 186). Moscovici (1976/2008) even went as far as to say that “an eighteenth-century mechanist who was a follower of Newton was by definition a dogmatist because there was no scientific paradigm other than that created by the great English scientist” (p. 186). What is thus needed is a social psychology that *connects up thinking with membership in different social groups, and thus allows us to track how a person’s thinking on a particular subject will change depending on the situation they are asked a question in*. An individual’s thinking on a particular subject will likely vary as a function of whether they are asked as a professional doctor, church member or country club associate. These different forms of thought (i.e., social representations) are also likely to interpenetrate, influence and resist one another. Gillespie (2008), for example,

has outlined a number of “semantic barriers” individuals in Moscovici’s study (1976/2008) used to block influence from other groups’ social representations, which they are nonetheless aware of.

Thus, different social groups in a society have distinctive ways of understanding the world (though an individual that is a member of multiple groups may mix the different group understandings in his or her own way). Each social group provides its members with values, beliefs and practices (i.e., social representations) for recognizing, acting on and communicating about aspects of their world. According to Moscovici (1981), the primary function of social representations is ‘to make the unfamiliar familiar’, which is a phrase he takes over directly from Bartlett (1932). In other words, anything new is seen and understood in terms of the old. As such, “memory tends to predominate over logic, the past over the present, the response over the stimuli and the image over the ‘reality’” (Moscovici, 1981, p. 189). These dynamics of social thinking are contrasted with logic and scientific inference, where rigid procedures are designed to counteract these processes such that the familiar becomes unfamiliar. By contrast, “in social thought, conclusions have primacy over premises, and as Nelly Stephanie so aptly put it, ‘the verdict rather than the trial dominates our social relations’”. (Moscovici, 1981, p. 190). This is very close to Bartlett’s (1932) idea that psychological processes involve “an effort after meaning” whereby the material present always points beyond itself to a *setting* or *scheme*, which operates as an organized mass of previous experience giving form to the new material. In Gestalt terms, a figure can only appear against some ground, as in Rubin’s face-vase illusion. Like Moscovici, Bartlett also emphasized, that this ground has irreducible social dimensions to it and as such, understanding an individual’s functioning requires embedding it within social life, in the traditions and beliefs of different groups the individual participants in. In Moscovici’s (2001) words, “nobody’s mind is free from the effects of the prior conditioning which is imposed by his representations, language and culture” (p. 23). These social-psychological processes can begin to explain those aspects common to social thinking, which appear scandalous from the standpoint of science. For example, how it is that people see, interact and coexist with ghosts, demons, jinns, saints and spirits. How the practice of magic, witchcraft and oracles has continued to be practiced by people for thousands of years all over the world.

It is also interesting to note the parallel language both Bartlett and Moscovici use to describe the social-psychological dynamics of thinking. I have already noted the key phrase

“making the unfamiliar familiar” but there are many others (see also Saito, 2000, p. 170). Moscovici himself acknowledges the important role Bartlett’s (1932) analysis of ‘conventionalization’ played in his articulation of ‘objectification’ (see Moscovici & Marková, 1998, p. 389), which he describes as involving making the abstract ‘concrete’ and then projecting this image outwards onto the world to construct a *sui generis* social reality – both of these processes are also mentioned by Bartlett (1932). With regards to the process of anchoring as well, we find a close affinity between the two thinkers. Anchoring involves ‘naming’ and ‘categorizing’ in order to assimilate the new into a familiar cultural framework. For Bartlett, ‘naming’ was a strategy used by his subjects to render their relation to some ambiguous material more definite, and in turn it shaped the representation of the material. For example, in an experiment in which simple figures were shown to subjects for a brief interval, one subject named a figure ‘pick-axe’ and represented it with pointed prongs, while another named it ‘turf cutter’ and rounded the blade (Bartlett, 1932, p. 20). This is a rather simple illustration of a process that is constantly operating in our everyday lives, which constructs an intersubjectively shared world to act on and communicate with others about. In the next section, we will explore research strategies to further investigate these dynamics of everyday thinking.

CONSTRUCTIVE THINKING AND FILLING IN GAPS

In this last section, we turn directly to the topic of ‘everyday thinking’ in Bartlett’s thought, to discuss a further point of influence between Bartlett and Moscovici. Jahoda (1988, p. 205) argues that Bartlett’s (1958) “idea of what he called ‘everyday thinking’ seems to have been utilized by Moscovici in his theory, though Bartlett is not given any credit”. Here I will focus on what Bartlett’s approach might add to SRT in general and the study of cognitive polyphasia in particular. Specifically I will concentrate on his methodology, which I see as one of his most important contributions. Bangerter (1997, 2000) has already pointed out how Bartlett’s method of serial reproduction can be fruitfully incorporated into SRT research, and thus I will not comment on it here. Instead, my focus will be on methods he developed later in his career to study ‘everyday thinking’. These methods were a natural extension of those developed to study cultural transmission and remembering. In fact, in his 1917 *St Johns Fellowship Dissertation*, where this

work was first reported, there are already suggestions for developing the kinds of methods that he would begin to use thirty years later. They would become an important component of a general programme of experiments on different forms of thinking. One puzzling aspect of this programme is that Bartlett recognizes the primacy of everyday thinking yet the greatest part of his book *Thinking: An experimental and social study* (1958) is devoted to more conventional topics in the psychology of thought, namely, logic puzzles. In what follows I will briefly sketch out his general programme and then focus on his methods for the study of everyday thinking, as a means of exploring cognitive polyphasia.

Bartlett (1958) begins by characterizing thinking as a process of “filling in gaps” in information, while recognizing that not all gap filling is thinking. He makes an analogy between bodily skills and thinking to orient his inquiry. Through research done during the Second World War, he found that bodily skills could be best characterized by filling in gaps, the timing of responses, reaching a region of no return and having direction. If thinking is understood as “a complex and high-level kind of skill” (p. 11), the question becomes in what ways do the characteristics of bodily skill manifest themselves in thinking activity? This focus tends to obscure the analysis of the social and cultural dimensions of thought, though this does not entirely disappear. Bartlett (1958) offers a broad typology and characterizations of different forms of thought. The first half of *Thinking* (1958) is devoted to what he calls thinking in ‘closed systems’ (such as the word puzzle or filling in a series of numbers), where uncertainty is limited and thought can move along its course. These he says are more amenable to experimental investigation. When he comes to scientific, artistic and everyday thinking the situation changes. For scientific thinking we are told a story of his own inspiration for writing *Remembering*. This involved contact with many colleagues and ideas at Cambridge, which he was able to bring together into a new synthesis. In this way, he describes in his own life the growth of culture through cultural contacts, as he had earlier identified in his book *Psychology and Primitive Culture* (1923).

By ‘everyday thinking’ Bartlett (1958) means, “those activities by which most people, when they are not making any particular attempt to be logical or scientific, try to fill up gaps in information available to them” (p. 164). Thus, here thinking is a response to an indeterminate situation where several solutions are possible, rather than the single solution required in closed

systems. Moreover, these situations and responses have a strong ‘social colouring’. As such individuals as group members tend to concentrate on a single or group of details, which in turn over-determines their thinking and leads them to ignore or bend all other information. This is similar to Moscovici’s characterization of everyday thinking, where the conclusion justifies the steps to reach it, or the verdict justifies the trial. To study this process, Bartlett “devised a number of concrete situations, all involving group relations not too far removed from the possible experience of the people who would deal with them. They were left in an incomplete state, and the subjects in the experiments were to be asked to continue them to what they thought would be their most likely issue” (Bartlett, 1958, p. 168). This research strategy comes close to his earlier methods for the study of remembering narratives, such as *War of the Ghosts*. However, in this case, the gaps are introduced from the start, rather than occurring as a result of the passing of time and with it the disintegration of memory.

The earliest study of thinking using incomplete narratives was a 1938 article titled “the cooperation of social groups”, in which two prose passages were used that described a conflict and resolution between two groups. In the first story this concerned the Union of Agricultural Engineers and the Association of Agricultural Labourers, while the second story depicted a small village in North England, in which Roman Catholics and Anglicans were forced to work together as a result of a drought in the community. Bartlett (1938) then asked subject “to try to express an opinion, based on psychological grounds only, as to whether the co-operation sought between the two groups is likely to be successfully maintained, or must inevitably break down” (p. 38). His fifty subjects were divided into two general classes: (1) persons associated with the university (i.e., students, researchers and lecturers) and (2) “persons having practical, wage earning activities or the like, without a university training, but with a wider experience of everyday human affairs” (p. 38). Thus, Bartlett is able to compare the patterns of responses of these two already existing social groups. In so doing he conceptualizes his subjects as socially embedded as he had in his earlier work. He finds in the first case that the “university group” was equally divided between probable permanence and probable breakdown, whereas in the “practical group” 20% were for permanence and 80% for breakdown; however, with regards to the second conflict there was no difference between the groups. In the first case, there was also a difference between these the university group and practical group in what “evidence” was selected from the

passages to justify their conclusions. For example, “To the practical group a difference in I.Q. appeared far more important and more antagonistic to co-operation than to the university group” (p. 39).

Carmichael (1940), who was a student of Bartlett, further developed this method, by introducing gaps at different points in the prose passage and by comparing thinking amongst Greenlanders with results obtained by Bartlett with the English, which is used to show Lévy-Bruhl’s distinction between primitive and advanced mentality to be in error. From the results of all these studies and others using a similar methodology, Bartlett (1958) concludes that:

Everyday thinking... consists in the main of some single generalization, advanced as if it were incontestable, with or without evidence; but if with evidence, usually with less than might be used. Generalization and selective evidence are alike strongly socially determined. The first can nearly always be found to be current in some group of which the thinker is a member, and the second, provided it is not just personal recall, is precisely the same evidence that many other members of the group also select. (p. 178)

Bartlett (1938, 1958) and Carmichael (1940) are thus doing much more than opinion polling with this method. Subjects’ responses are not taken as individual opinions but rather as embedded members of different social groups. Thus, they are practicing a more ‘social’ social psychology by situating psychological processes within society, different social groups’ ways of thinking and their relations (Greenwood, 2004). This focus is in line with the experimental approach Bartlett (1932) used in *Remembering*. What is left out of their analysis, but present in Bartlett’s earlier work, is the use of single cases to illustrative instances of the processes identified at the level of the sample. We are at most given quotations from subject, which have been extracted from the individual’s whole account. Thus, it is difficult to analyze how different modes of thought might co-exist in a single case, even if broader social patterns have been identified.

CONCLUSION: TOWARDS A SOCIAL PSYCHOLOGICAL METHODOLOGY FOR THE ANALYSIS OF EVERYDAY THINKING

Social representations researchers could use a methodology akin to Bartlett's analysis of everyday thinking to elicit, compare and engage different groups' and individuals' ways of thinking. The advantage of this method is its (1) ability to trace how an individual's mode of thought changes with topic area, rather than treating an individual or group's thinking as primitive or advanced in itself, (2) highlighting of the conventional framework through which individuals think, rather than treating thinking as a purely individual activity, (3) study of objectification through filling in gaps of information, rather than ignoring the constructive and open nature of thinking, and (4) use of concrete socially interesting material for subjects to discuss, rather than abstract logical puzzles. Wagner et al. (1999) have, in fact, already used a vignette method, similar to Bartlett's everyday thinking method, to explore different social representations of mental illness in India. Like Bartlett (1958), they found that the representational framework adopted is strongly linked to social context – for example, the family or university. Thinking about the world in a certain way identifies one with a social group: different social groups objectify reality in different ways. One could extend Bartlett's method by simply asking subjects "As a member of group X..." in order to elicit different social frameworks of thought and analyze their differences. Schank (1932) found that asking Baptists whether they preferred sprinkling to immersion in this way, dramatically changed the character of their response, when compared to being asked their individual opinions. Moreover, the method could be extended to explore "alternative representations" (Gillespie, 2008), representations of other's representations, by having subjects comment on how other social groups might fill in the gaps in the given incomplete situation. Many other possibilities abound. As of yet little has been done to develop this fruitful methodological resource.

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BRADY WAGONER completed his Ph.D. at University of Cambridge and is now associate professor of psychology at Aalborg University, Denmark. His interests include cultural psychology, the history and philosophy of psychology, constructive memory, existentialism, pragmatism and the absurd pursuit of mountain summits. He is on the editorial board of *Culture & Psychology*, *Journal for the Theory of Social Behavior* and *Integrative Psychological and Behavioral Science*, and is co-founding editor of *Psychology & Society* [accessed at: <http://www.psychologyandsociety.org/>]. Additionally, he is a co-creator of the *Sir Frederic Bartlett Internet Archive* [accessed at: <http://www.sdp.cam.ac.uk/bartlett/>] and has published *Symbolic Transformation: The Mind in Movement through Culture and Society* (Routledge), *Dialogicality in Focus* (Nova) and most recently *Culture and Social Change: Transforming Society through the Power of Ideas* (Info Age). He is currently working on a book titled *Bartlett in Reconstruction: Where Culture and Mind Meet* (Cambridge). Email: wagoner@hum.aau.dk